

APPENDIX B APPLICATION REQUIREMENTS.

TABLE OF CONTENTS

SECTION	PAGE
B.1 GENERAL PROVISIONS	B-2
B.2 MAJOR SUBDIVISION PLAT	B-3
B.3 MINOR SUBDIVISION PLAT	B-8
B.4 MAJOR SITE PLANS	B-12
B.5 MINOR SITE PLANS.....	B-13
B.6 LANDSCAPING AND MAINTENANCE PLAN.....	B-14
B.7 GRADING AND CONSERVATION PLAN.....	B-15
B.8 ARCHITECTURAL PLAN.....	B-16
B.9 FLOOD PREVENTION PLAN	B-17
B.10 WATERSHED VARIANCE	B-19
B.11 TRAFFIC IMPACT STUDY.....	B-20
B.12 PLOT PLAN	B-22
B.13 STORMWATER CONCEPT PLAN	B-23

B.1. GENERAL PROVISIONS.

- The Administrator shall promulgate submittal requirements, instructions for completing forms, and internal procedures for acceptance and filing of applications. Additional information may be required for particular applications. Necessary forms for all applications for:
 - administrative permits;
 - applications for Board of Adjustment review;
 - applications for Planning Commission review; and
 - applications for City Council review.
- All such forms/applications shall be maintained at the office of the Administrator.

B.2. MAJOR SUBDIVISION PLAT.

- ***General Requirements.***

- Preliminary Plat - The subdivider shall submit five (5) copies of a preliminary subdivision plat to the Planning Department for processing and referral to affected agencies along with the appropriate subdivision plat review fee and application. Fifteen (15) copies should be submitted for review by the Planning & Zoning Commission after being notified by the Administrator of item placement on the Commission agenda.
- Final Plat -The subdivider shall submit ⁽¹⁾five (5) copies with the appropriate subdivision review fee and application (if updated information is necessary). If a Subdivision Improvement Agreement is required, the subdivider shall submit all required information with the application. Two (2) mylars should be submitted after approval has been granted, with one to be kept by the City. ⁽¹⁾A digital copy of the final plat must be submitted with the mylar submittals.
- Construction Plans - The subdivider shall furnish the Planning Department with three (3) copies of all construction plans and specifications, prepared and endorsed by a certified professional engineer or landscape architect, licensed as such by the State of North Carolina to perform such work. The construction plans shall delineate and describe in complete detail all aspects of grading, clearing, drainage and physical improvements proposed both on and off-site, as required in relation to the proposed subdivision.

- ***Requirements for a Sketch Plan.***

- Sketch plans shall be drawn to a convenient scale of not more than one hundred (100) feet to an inch. Supporting information required by this section may allow for a larger scale.
- *Contents required.*
 - 1) Type of development.
 - 2) Name, address, and telephone number of developer and designer.
 - 3) Graphic and written scale.
 - 4) Proposed name of subdivision.
 - 5) Current Zoning and district lines.
 - 6) Total acreage of the site.
 - 7) Total number of proposed lots/units and the approximate location and dimensions of all proposed or existing lots.
 - 9) The approximate location, dimensions, and area of all parcels of land proposed to be set aside for park or playground use or other public use, or for the use of property owners in the proposed subdivision.
 - 10) Whenever the sketch plan covers only a part of an applicant's contiguous holdings, the applicant shall submit, the proposed subdivision or development area, together with its proposed utilities and street system, and an indication of the probable future street system, and an indication of the probable future utilities and street and drainage system of the remaining portion of the tract.
 - 11) Approximate topography.
 - 12) Existing utilities available to the site and preliminary proposals for connection with existing water supply and sanitary sewage systems, or alternative means of providing water supply and sanitary waste treatment and disposal; preliminary provisions for collecting and discharging surface water drainage.

- ***Requirements for Preliminary Plat***

- No specific size requirements apply to preliminary plats. Preliminary plats shall be prepared at a scale of one (1) inch equals one hundred (100) feet, or a scale for which one (1) inch equals a distance less than one hundred (100) feet. The preliminary plat shall be prepared by a registered land surveyor, professional engineer or professional landscape architect and shall depict or contain the information set forth below. Incomplete plans shall be returned to the subdivider without further review until revised and resubmitted, provided, however, that construction plans may be submitted after approval of a preliminary subdivision plat by the Planning and Zoning Commission when such approval is made subject to the submission of said construction plans and approval of same by the ⁽¹⁾Public Works Director and City Engineer.
- *Contents required.*
 - 1) Legend--Title and revision number;
 - 2) Location map showing relationship of subdivision to the city and surrounding area;
 - 3) Tract boundaries shown by a heavy line including all bearings and distances;
 - 4) Existing and proposed property lines, any structures, water courses, railroads, bridges, culverts, and storm drains on the tract and on adjoining property within 100’;
 - 5) Lot lines and scaled dimensions, lot numbers;
 - 6) Proposed street names, right-of-way and pavement widths, and typical cross-sections;
 - 7) Existing streets on subject and adjoining properties including right-of-way and pavement width;
 - 8) Proposed easements or rights-of-way other than for streets (e.g. for drainage, storm water detention, utilities, pedestrian ways, buffers); location, width and purpose;
 - 9) Zoning classification and district lines on the tract and adjoining properties;
 - 10) Names and PIN numbers of adjoining property owners and subdivisions both proposed and of record;
 - 11) Site calculations, including:
 - (a) Total acreage,
 - (b) Number of lots in each phase,
 - (c) Total number of lots in the subdivision,
 - (d) Acreage in lots,
 - (e) Acreage in street rights-of-way,
 - (f) Linear feet of each individual street, and
 - (g) Anticipated date of final platting;
 - 12) The location and size of parks, school sites, open space areas, etc. and their ownership;
 - 13) Existing topography at a contour interval of two (2) feet;
 - 14) Boundaries of floodways and one hundred-year flood plains; and
 - 15) Building Setbacks (in table format).
 - 16) Proposed location of water and sanitary sewer systems.
 - 17) Deed reference, tax parcel number, and address of parent tract

- **Requirements for a Final Plat**

- *Contents required.*

- 1) Legend containing subdivision names, vicinity map, legal description including township, county and state, the date or dates of survey, the date of any revisions to plat, a north arrow and declaration, scale in feet per inch and bar graph, the name and address of the owner(s) and the name, address, registration number and seal of engineer and/or surveyor and/or landscape architect;
- 2) Exact boundary lines of tract in heavy line, full dimensions by lengths and bearings, and intersecting boundaries of adjoining lands;
- 3) ⁽¹⁾A digital copy of the final plat must be submitted with the mylar submittal;
- 4) Street names, right-of-way lines, and the location and dimensions of all easements;
- 5) Accurate descriptions and locations of all monuments, markers, and control points;
- 6) Location, purpose, and dimensions of areas to be used for other than residential purposes;
- 7) Sufficient engineering data to determine readily and reproduce on the ground every straight or curved boundary, street, and setback line including dimensions, bearings, or deflection angles, radius, central angles, and tangent distances for the center line of curved streets and curved property lines that are not the boundary of curved streets. All dimensions shall be measured to the nearest tenth and angles to the nearest minute;
- 8) Boundaries of floodways and one hundred-year flood plains;
- 9) Lots numbered consecutively throughout the subdivision;
- 10) The names of owners of adjoining properties;
- 11) Building Setbacks (in table format).
- 12) Site calculations, including:
 - (a) Total acreage;
 - (b) Total number of lots;
 - (c) Acreage in lots;
 - (d) Acreage in street rights-of-way;
 - (e) Linear feet of each individual street;
- 13) The following certificates shall appear on all copies of the plat. Items (a) and (b) shall be signed when submitted. Items (c), (d), and (e), will be signed when the plat is approved:
 - (a) *Certificate of ownership and dedication.*

I hereby certify that I am owner of the property shown and described hereon, which is located in the subdivision jurisdiction of the City of Kannapolis, and that I hereby submit this plan of subdivision with my free consent, establish minimum building setback lines, and dedicate to public use all areas shown on this plat as streets, walks, parks, open space and easements, except those specifically indicated as private, and that I will maintain all such areas until accepted by the City of Kannapolis, and further that I hereby guarantee that I will correct defects or failure of improvements in such areas for a period of one year commencing after a certificate of approval has been executed by the city, or after final acceptance of required improvements, whichever occurs later.

Owner

(b) *Certificate of Survey and Accuracy.*

I, _____, certify that this map was (drawn by me) (drawn under my supervision) from (an actual survey made by me) (an actual survey made under my supervision) (deed description, etc.) (other); that the error of closure as calculated by latitudes and departures is 1:_____; that the boundaries not surveyed are shown as broken lines plotted from information found in Book _____, Page _____; that this map was prepared in accordance with General Statute 47-30, as amended.

Witness my hand and seal this _____ day of _____, 20_____ A.D.

Surveyor or Engineer

License or Registration Number

(c) *Certificate of streets, water and sewer system approval and other improvements.*

I hereby certify that all streets, storm drainage systems, water and sewer systems and other improvements have been designed and installed, or their installation guaranteed, in an acceptable manner and according to specification and standards of Kannapolis and the State of North Carolina in the _____ Subdivision.

Date

(2)City Engineer

Date

(2)Public Works Director

(d) *Certificate of final plat approval.*

It is hereby certified that this plat is in compliance with the Subdivision Regulations of the City of Kannapolis, and therefore this plat has been approved, subject to its being recorded with the Cabarrus (Rowan) County Register of Deeds within 30 days of the date below.

Date

Planning Director

(1)(e) *Plat Review Officer Certificate (as required by G.S. 47-30.2)*

State of North Carolina
County of Cabarrus/Rowan

I, _____, Review Officer of the County of (Cabarrus)(Rowan), certify that the map or plat to which this certification is affixed meets all statutory requirements for recording.

Review Officer

⁽¹⁾(f) *Statement of Active Open Space (see Section 6.5.3.6.4 to determine if applicable)*

Active open space improvements, as defined in Section 6.5.3.1.2, shall be required for this plat and shall equal a total minimum financial investment of 200% of the pre-development tax value for the amount of dedicated land from the parcel from which the open space is being dedicated as required.

(g) *Easement Statement*

Encroachment of any structures or landscaping, including, but not limited to, driveways, pools, fences, trees, wells, reservoirs, or other obstructions, which would interfere with free, easy, and clear access to utilities on any easement, are prohibited. However, certain structures, filling, or grading may be permitted upon execution of an express Encroachment Agreement. The City of Kannapolis may authorize an Encroachment Agreement, but only after review and approval of detailed plans.

(h) *Public Utility Easement Statement*

All open space depicted or identified on this plat shall be subject to and encumbered by a general public utility easement in gross benefiting the City of Kannapolis. The City of Kannapolis, its agents, employees, successors, and assigns shall have the right of ingress, egress, and regress over and upon any property designated on this plat as open space for the purposes of locating, laying, constructing, reconstructing, inspecting, operating, extending, maintaining, and otherwise keeping open and in good repair any public municipal utility including, but not limited to, water systems, sanitary sewer systems, and public stormwater systems.

B.3. MINOR SUBDIVISION PLAT.

- ***General Requirements.***

- **Final Plat** - The subdivider shall submit five (5) copies of a minor subdivision plat to the Administrator for processing, along with the appropriate subdivision plat review fee and application. If a Subdivision Improvement Agreement (letter of credit, cash escrow or surety bond) is required due to incomplete installation of utility extensions, the subdivider shall submit all required information with the application. ⁽¹⁾A digital copy of the final plat must be submitted with the mylar submittals.
- **Construction Plans (if applicable)** - If utility extensions are required, the subdivider shall furnish the Planning Department with three (3) copies of all construction plans and specifications, prepared and endorsed by a certified professional engineer, licensed as such by the State of North Carolina. The construction plans shall delineate and describe in complete detail all aspects of grading, clearing, drainage and physical improvements proposed both on and off-site, as required in relation to the proposed subdivision.

- ***Requirements for a Sketch Plan.***

- Sketch plans shall be drawn to a convenient scale of not more than one hundred (100) feet to an inch. Supporting information required by this section may allow for a larger scale.
- ***Contents required.***
 - 1) Type of development.
 - 2) Name, address, and telephone number of developer and designer.
 - 3) Graphic and written scale.
 - 4) Proposed name of subdivision.
 - 5) Current Zoning and district lines.
 - 6) Total acreage of the site.
 - 7) Total number of proposed lots/units and the approximate location and dimensions of all proposed or existing lots.
 - 8) The approximate location, dimensions, and area of all parcels of land proposed to be set aside for park or playground use or other public use, or for the use of property owners in the proposed subdivision.
 - 9) Whenever the sketch plan covers only a part of an applicant's contiguous holdings, the applicant shall submit, the proposed subdivision or development area, together with its proposed utilities and street system, and an indication of the probable future street system, and an indication of the probable future utilities and street and drainage system of the remaining portion of the tract.
 - 10) Approximate topography.
 - 11) Existing utilities available to the site and preliminary proposals for connection with existing water supply and sanitary sewage systems, or alternative means of providing water supply and sanitary waste treatment and disposal; preliminary provisions for collecting and discharging surface water drainage.

- **Requirements for a Final Plat.**

- *Contents required.*

- 1) Legend containing subdivision names, vicinity map, legal description including township county and state, the date or dates of survey, the date of any revisions to plat, a north arrow and declaration, scale in feet per inch and bar graph, the name and address of the owner(s) and the name, address, registration number and seal of engineer and/or surveyor;
- 2) Exact boundary lines of tract in heavy line, full dimensions by lengths and bearings, and intersecting boundaries of adjoining lands;
- 3) ⁽²⁾A digital copy of the final plat must be submitted with the mylar submittal;
- 4) Street names, right-of-way lines and the location and dimensions of all easements, ⁽¹⁾and show the location of public water and sewer lines on the final plat submittal;
- 5) Accurate descriptions and locations of all monuments, markers, and control points;
- 6) Sufficient engineering data to determine readily and reproduce on the ground every straight or curved boundary, street, and setback line including dimensions, bearings, or deflection angels, radius, central angles, and tangent distances for the centerline of curved streets and curved property lines that are not the boundary of curved streets. All dimensions shall be measured to the nearest tenth and angles to the nearest minute;
- 7) Boundaries of floodways and one-hundred-year (100-year) floodplains;
- 8) Lots numbered consecutively throughout the subdivision;
- 9) The names of owners of adjoining properties;
- 10) Building Setbacks (in table format).
- 11) Site calculations, including:
 - (a) Total acreage, and
 - (b) Total number of lots; and
- 12) The following certificates shall appear on the plat. Items (a), (b) and (c) shall be signed when submitted. Item will be signed when plat is approved.
 - (a) ⁽¹⁾*Certificate of ownership and dedication.*

I hereby certify that I am owner of the property shown and described hereon, which is located in the subdivision jurisdiction of the City of Kannapolis, and that I hereby submit this plan of subdivision with my free consent, establish minimum building setback lines, and dedicate to public use all areas shown on this plat as streets, walks, parks, open space and easements, except those specifically indicated as private, and that I will maintain all such areas until accepted by the City of Kannapolis, and further that I hereby guarantee that I will correct defects or failure of improvements in such areas for a period of one year commencing after a certificate of approval has been executed by the city, or after final acceptance of required improvements, whichever occurs later.

Owner

(1) City Council approved 4/23/2001

(2) City Council approved 6/26/2006

(b) *Certificate of survey and accuracy.*

I, _____, certify that this map was (drawn by me) (drawn under my supervision) from (an actual survey made by me) (an actual survey made under my supervision) (deed description recorded in Book _____, Page _____, Book _____, Page _____, etc.) (other); is 1: _____; that the boundaries not surveyed are shown as broken lines plotted from information found in Book _____, Page _____, that this map was prepared in accordance with General Statute 47-30 as amended.

Witness my hand and seal this _____ day of _____ 20_____ A.D.

Surveyor or Engineer

License or Registration Number

Upon approval of the minor subdivision final plat, by the planning director and appropriate public works officials, the following signed certificate shall be shown on each copy of the plat reflecting such approval:

(c) *Certificate of final plat approval.*

By authority of the City of Kannapolis Subdivision Regulations, this final plat for the _____ Subdivision is hereby approved.

Date

Director of Planning

(the following signature lines are to be added for subdivisions without any improvements)

Date

(2)City Engineer

Date

(2)Public Works Director

(d) ⁽¹⁾*Certificate of water and sewer system approval and other improvements. (for subdivisions with improvements)*

I hereby certify that all streets, storm drainage systems, water and sewer systems and other improvements have been designed and installed, or their installation guaranteed, in an acceptable manner and according to specification and standards of Kannapolis and the State of North Carolina in the _____ Subdivision.

Date

(2)City Engineer

Date

(2)Public Works Director

(e) Plat Review Officer Certificate (as required by G.S. 47-30.2)

State of North Carolina
County of Cabarrus/Rowan

I, _____, Review Officer of the County of (Cabarrus)(Rowan), certify that the map or plat to which this certification is affixed meets all statutory requirements for recording.

Review Officer

(f) Easement Statement

Encroachment of any structures or landscaping, including, but not limited to, driveways, pools, fences, trees, wells, reservoirs, or other obstructions, which would interfere with free, easy, and clear access to utilities on any easement, are prohibited. However, certain structures, filling, or grading may be permitted upon execution of an express Encroachment Agreement. The City of Kannapolis may authorize an Encroachment Agreement, but only after review and approval of detailed plans.

(g) Public Utility Easement Statement

All open space depicted or identified on this plat shall be subject to and encumbered by a general public utility easement in gross benefiting the City of Kannapolis. The City of Kannapolis, its agents, employees, successors, and assigns shall have the right of ingress, egress, and regress over and upon any property designated on this plat as open space for the purposes of locating, laying, constructing, reconstructing, inspecting, operating, extending, maintaining, and otherwise keeping open and in good repair any public municipal utility including, but not limited to, water systems, sanitary sewer systems, and public stormwater systems.

B.4. MAJOR SITE PLANS (Conditional use rezonings/Conditional use permits).

Contents required:

- 1) A description of the proposed development including proposed uses and coverage.
- 2) The following data, when such data is applicable to a given development plan:
 - Total number of dwelling units, by development phase;
 - Residential density and units per acre;
 - Total floor area and floor area ratio for each type of use;
 - Total area in open space;
 - Total area in developed recreational open space; and
 - Total number of off-street parking and loading spaces.
- 3) ⁽¹⁾A Plot Plan as defined in this Appendix B, with the following additions:
 - Location and widths of existing and proposed streets, drives, entrances, sidewalks, paths and any other pedestrian and vehicular circulation systems.
 - Size and/or types of yards as required by Article 7
 - Location for all ground-mounted signs.
 - Location, acreage and category of passive and active (if required) open space.
 - Location of solid waste container(s) with type of screening noted.
 - General phasing information if the project is to be completed in phases.
 - Noted areas (if any) of undisturbed land which is to remain as is.
 - Delineation of all areas of special flood hazard as defined in Section 4.14 or wetlands as defined in Appendix A.
 - Location and size, in acres, of any proposed school sites.
- 4) ⁽¹⁾Submission of an architectural plan consistent with the provisions of this Appendix B.
- 5) ⁽¹⁾A preliminary Utility Plan ⁽²⁾and site plan shall be consistent with the Land Development Standards Manual (LDSM)

⁽¹⁾It is understood that the information provided above will be used by the Administrator to determine if adequate facilities are available to support the proposed development as set forth in Article 14 of this ordinance.

Number of copies to be submitted shall be specified on the application, as it may vary subject to the approving board(s) that may review plan.

(1) City Council approved 6/24/2002

(2) TA-2019-05 – City Council approved 12/09/2019

B.5. MINOR SITE PLANS (Administrative permits).

- *Contents required:*
 - A description of the proposed development including proposed uses and coverage.
 - The following data, when such data is applicable to a given development plan:
 - Total number of dwelling units, by development phase;
 - Residential density and units per acre;
 - Total floor area and floor area ratio for each type of use;
 - Total area in open space;
 - Total area in developed recreational open space; and
 - Total number of off-street parking and loading spaces.
 - The location and arrangement of all proposed uses or lots. For uses other than single-family, the massing (height and width) and number of floors of all buildings shall be shown.
 - Location for all ground-mounted signs (and lighting).
 - Submission of an architectural plan consistent with the provisions of this Appendix B.
 - If a phased project, a development phasing schedule including the sequence for each phrase; approximate size in area of each phase; and, proposed phasing of construction of public improvements, recreation and common open space areas.
 - The approximate location and widths of proposed streets.
 - The location of all entrances onto adjacent roadways, whether existing or proposed.
 - The traffic and the pedestrian circulation system, including the location and width of all streets, driveways, entrances to parking areas and parking structures, walkways and bicycle paths.
 - Off-street parking and loading areas and structures, including the number of spaces; dimensions of spaces and aisles; and landscaping for parking areas.
 - Delineation of floodplain areas, wetlands, river/stream overlay areas, and watershed stream buffers and all other environmentally sensitive areas.
 - Preliminary proposals for connection with existing water supply and sanitary sewage systems, or alternative means of providing water supply and sanitary waste treatment and disposal; preliminary provisions for collecting and discharging surface water drainage.
 - The location of existing public utility easements, railroads, power lines, culverts, drain pipes, drainage channels, flood channels, water bodies, streams, swaps, parks, cemeteries, bridges, or irrigation ditches.
 - Location of proposed water and sewer lines.
 - Location of existing vegetative cover to be retained.
 - The proposed treatment of the perimeter of the development, including materials and techniques used, such as landscaped buffers, fences, berms or walls.
 - The location, acreage, category and type of improvements for passive and active (if required) open space.
 - Location of solid waste containers including proposed design provisions for screening.
 - Information relating to compliance with the adequate public facilities requirements of Article 14 of this Ordinance and consistent with the APF submission requirements as included in this Appendix B
 - Location and size in acres of school sites (if planned).
 - Grading plan ⁽¹⁾and site plan shall be consistent with the requirements of this Appendix B ⁽¹⁾and the Land Development Standards Manual (LDSM).
- The developer/applicant shall submit ten (10) folded copies of a minor site plan to the Planning Department for processing and referral to affected agencies along with the appropriate review fee and application..

B.6. LANDSCAPING AND MAINTENANCE PLAN.

- *Contents Required:*
- A general landscaping delineation indicating the treatment of materials used for open space, landscaped buffers and common ownership (Minimum scale of 1" = 40').
- Planting areas drawn to scale with a list of the botanical and common names, and size of all plants designated for each area.
- Location, name, and size of all existing trees, shrubs, groundcover and other plant materials that are to be incorporated as part of the landscape plan.
- Location and width of landscaped buffer strips, including height of berms.
- Location and sizes of irrigation facilities adequate to maintain the planting areas. (Use of automatic watering systems is encouraged).

B.7. GRADING AND CONSERVATION PLAN.

- *Contents Required:*
 - The plan shall have a minimum scale at 1" = 40' with 2' contour intervals.
 - The plan ⁽¹⁾shall be on a separate plan sheet from the site plan and shall consist of one or more plan sheets showing:
 - topographic information showing existing features and conditions and proposed clearing and grading; and
 - the extent, location, and type of proposed fill materials.
 - proposed cuts and fills required by the location of all building structures and streets and roads.
 - The plan shall show the degree to which the proposed development will preserve existing features on the site. This shall include features such as healthy desirable trees, shrubs and other vegetation, waterways, vistas, and historic sites.
 - For the purposes of obtaining a Grading Permit (Section 3.2 of this Ordinance), Plan may also include information as required for a Flood Prevention Plan (see below).

B.8. ARCHITECTURAL PLANS (as required for this Ordinance*).

* This shall not include requirements for submission of a Building Permit.

- The architectural plans shall depict architectural details of the proposed development and shall consist of:
 - Preliminary renderings of building elevations plus typical cross sections to clearly define the character of the project;
 - A cross-section elevation plan depicting all buildings, structures, monuments, and other significant natural and man-made features of the proposed development;
 - An exterior building materials inventory; and
 - any covenant or dedication establishing an architectural review board.

B.9. FLOOD PREVENTION PLAN.

The following items shall be presented to the Floodplain Administrator to apply for a Floodplain Development Permit:

1. A plot plan drawn to scale which shall include, but shall not be limited to, the following specific details of the proposed floodplain development:
 - The nature, location, dimensions, and elevations of the area of development/disturbance; existing and proposed structures, utility systems, grading/pavement areas, fill materials, storage areas, drainage facilities, and other development;
 - The boundary of the Special Flood Hazard Area as delineated on the FIRM or other flood map as determined in Section 4.14.5, or a statement that the entire lot is within the Special Flood Hazard Area;
 - Flood zone(s) designation of the proposed development area as determined on the FIRM or other flood map as determined in Section 4.14.5;
 - The boundary of the floodway(s) or non-encroachment area(s) as determined in Section 4.14.5;
 - The Base Flood Elevation (BFE) where provided as set forth in Section 4.14.5; 4.14.12; or 4.14.28;
 - The old and new location of any watercourse that will be altered or relocated as a result of proposed development;
 - Certification of the plot plan by a registered land surveyor or professional engineer.
2. Proposed elevation, and method thereof, of all development within a Special Flood Hazard Area including but not limited to:
 - Elevation in relation to mean sea level of the proposed reference level (including basement) of all structures;
 - Elevation in relation to mean sea level to which any non-residential the structure in Zone AE, A, or AO will be floodproofed; and
 - Elevation in relation to mean sea level to which any proposed utility systems will be elevated or floodproofed;
3. If floodproofing a Floodproofing Certificate (FEMA ⁽¹⁾Form 086-0-34) with supporting data and an operations plans that includes, but is not limited to, installation, exercise, and maintenance of floodproofing measures.
4. A Foundation Plan, drawn to scale, which shall include details of the proposed foundation system to ensure all provisions of this Ordinance are met. These details include but are not limited to:
 1. The proposed method of elevation, if applicable (i.e. fill, solid foundation perimeter wall, solid backfilled foundation, open foundation on columns/posts/ piers/piles/shear walls);

2. Opening to facilitate automatic equalization of hydrostatic flood forces on walls in accordance with 4.14.19 of this Ordinance when solid foundation perimeter walls are used in Zones A, AO, AE, and ⁽¹⁾AH and A99;
5. Usage details of any enclosed areas below the lowest floor.
6. Plans and/or details for the protection of public utilities and facilities such as sewer, gas, electrical, and water systems to be located and constructed to minimize flood damage.
7. Certification that all other Local, State, and Federal permits required prior to floodplain development permit issuance have been received.
8. Documentation for placement of Recreational Vehicles and/or Temporary Structures, when applicable, to ensure that the provisions of 4.14.20 and 4.14.23 of this Ordinance are met.

A description of proposed watercourse alterations or relocation, when applicable, including an engineering report on the effects of the proposed project on the flood-carrying capacity of the watercourse and the effects to properties located both upstream and downstream; and a map (if not shown on plot plan) showing the location of the proposed watercourse alteration or relocation.

B.10. WATERSHED VARIANCE.

- A site plan, drawn to a scale of at least 1" = 40', indicating the property lines of the parcel upon which the use is proposed; any existing or proposed structures; parking areas and other built-upon areas; surface water drainage. The site plan shall be neatly drawn and indicate north arrow, name, and address of person who prepared the plan, date of the original drawing, and an accurate record of any later revisions.
- A complete and detailed description of the proposed variance, together with any other pertinent information which the applicant feels would be helpful to the Planning and Zoning Commission in considering the application.
- The Administrator shall notify in writing each local government having jurisdiction in the watershed and the entity using the water for consumption. Such notice shall include a description of the variance being requested. Local governments receiving notice of the variance request may submit comments to the Zoning Administrator prior to a decision by the Planning and Zoning Commission. Such comments shall become a part of the record of proceedings of the Planning and Zoning Commission.

B.11. TRAFFIC IMPACT STUDIES.

- A). **PREPARATION.** The applicant shall furnish the full rationale, from an engineer licensed by the State of North Carolina to perform such studies, to support the recommendations of this analysis. The submission shall include all pertinent traffic data and computations affecting the design proposal for the subdivision streets involved.
- B). **CONTENTS.** Traffic Rezoning Analysis or Traffic Impact Report shall contain information addressing the factors listed below.
- 1) **SITE DESCRIPTION:** The report shall contain illustrations and narrative that describe the characteristics of the site and adjacent land uses as well as expected development in the vicinity which will influence future traffic conditions. For a Rezoning Traffic Analysis, a description of potential uses to be evaluated shall be provided. For a Traffic Impact Report, a description of the proposed development including a access plans, staging plans and an indication of land use and intensity, shall be provided.
 - 2) **STUDY AREA:** The report shall identify the geographic area under study and identify the roadway segments, critical intersections and access points to be analyzed. The geographic area under study shall extend not less than one-half mile from the site.
 - 3) **EXISTING TRAFFIC CONDITIONS:** The report shall contain a summary of the data utilized in the study and an analysis of existing traffic conditions, including:
 - a) traffic count and turning movement information, including the source of and date when traffic count information was collected;
 - b) correction factors that were used to convert collected traffic data into representative average daily traffic volumes;
 - c) roadway characteristics, including the design configuration of existing or proposed roadways, existing traffic control measures (speed limits, traffic signals, or traffic calming measures) and existing driveways and turning movement conflicts in the vicinity of the site; and
 - d) identification of the existing Level of Service for roadways and intersections without project development traffic using methods documented in the Special Report 209: Highway Capacity Manual, published by the Transportation Research Board, or comparable accepted methods of evaluation. Level of Service should be calculated for the weekday peak hour and, in the case of uses generating high levels of weekend traffic, the Saturday peak hour.
 - 4) **HORIZON YEAR(S) AND BACKGROUND TRAFFIC GROWTH.** The report shall identify the horizon year(s) that were analyzed in the study, the background traffic growth factors for each horizon year, and the method and assumptions used to develop the background traffic growth. Unless otherwise approved by the Engineer, the impact of development shall be analyzed for the year after the development is completed and 10 years after the development is completed.
 - 5) **TRIP GENERATION, TRIP REDUCTION AND TRIP DISTRIBUTION.** The report shall summarize the projected a.m. and p.m. peak hour and average daily trip generation for the proposed development and illustrate the projected trip distribution of trips to and from the site and should identify the basis of the trip generation, trip reduction and trip distribution factors used in the study.
 - 6) **TRAFFIC ASSIGNMENT:** The report shall identify projected roadway segment, intersection or driveway traffic volumes, with and without the proposed development, for the horizon year(s) of the study;
 - 7) **IMPACT ANALYSIS:** The report shall address the impact of projected horizon year(s) traffic volumes relative to each of the applicable traffic service factors listed in paragraph 3 above and shall identify the

methodology utilized to evaluate the impact. The weekday peak hour impact shall be evaluated as well as the Saturday peak hour for those uses exhibiting high levels of weekend traffic generation.

- 8) MITIGATION /ALTERNATIVES: The report shall identify alternatives for achieving the traffic service standards listed in Article 14 and in addition shall:
- identify where additional right of way is needed to implement mitigation strategies;
 - identify suggested phasing of improvements where needed to maintain compliance with traffic service standards; and
 - identify the anticipated cost of recommended improvements.

C). PROCEDURES.

- 1) The applicant or his designated representative shall contact the Director of Transportation and the Administrator to establish whether a traffic study is needed and to define the parameters for the study. Following preparation of any traffic study, copies of the study report shall be submitted to the Administrator for distribution to staff of the roadway jurisdictions involved in the construction and maintenance of public roadways serving the development. A conference between the staff and applicant shall be held within 10 days to discuss the content and findings of the report and determine the need for any supplemental study or analysis.
- 2) When the Director of Transportation and the Administrator have determined that the content of the report adequately addresses the applicable Traffic Service Standards of Article 14 and purposes as listed in Article 14, a finding shall be made that the traffic impact study is complete and proceedings on any application that was stayed pending completion of a traffic analysis can resume.

D). REPORT FINDINGS.

- 1) When staff and the applicant concur that the technical analysis is complete, the report shall be forwarded to the platting authority at its next regular meeting. Negotiations with the platting authority, if needed, shall be held, and a Subdivision Improvement Agreement detailing the applicant's responsibilities and the City's responsibilities for implementing any mitigation measures shall be prepared, and what, if any, improvements may be assessed against other benefited properties.
- 2) If staff finds that the proposed development will not meet applicable service level standards, staff shall recommend one or more of the following actions on the associated development application, as may be needed:
 - Reduce the size, scale, scope or density of the development to reduce traffic generation;
 - Divide the project into phases and authorize only one phase at a time until traffic capacity is adequate for the next phase of development;
 - Dedicate right-of-way for street improvements;
 - Construct new streets;
 - Expand the capacity of existing streets;
 - Redesign ingress and egress to the project to reduce traffic conflicts;
 - Alter the use and type of development to reduce peak hour traffic;
 - Reduce background (existing) traffic;
 - Eliminate the potential for additional traffic generation from undeveloped properties in the vicinity of the proposed development;
 - Integrate non-vehicular design components (e.g., pedestrian and bicycle paths or transit improvements) to reduce trip generation; or
 - Recommend denial of the application for development for which the TIR is submitted.

B.12. PLOT PLAN

- *Contents Required:*
 - Location of structure(s), including but not limited to all proposed decks, steps, or other similar structural improvements
 - Building setbacks

B.13. Stormwater Concept Plan

- ***General Requirements.***

- The applicant shall submit three (3) copies of a Stormwater Concept Plan to the Administrator for processing, along with the appropriate review fee and application.
- The Concept Plan shall be drawn to a convenient scale of not more than one hundred (100) feet to an inch.

- ***Contents Required.***

- Proposed name and description of Project
- Total acreage of the site.
- Graphic and written scale.
- Current Zoning and district lines.
- Topographic information with 2-foot contour interval showing existing features and conditions.
- Existing tract boundaries including all bearings and distances.
- Existing property lines, any structures, water courses, railroads, bridges, culverts, and storm drains on the tract and on adjoining property with 100 feet.
- All streams and RSOD buffers clearly shown.
- FEMA flood information from the most recent available data.
- Preliminary locations of BMPs and storm drain easements.
- Location of off-street parking areas